

TITLE 327 WATER POLLUTION CONTROL BOARD

Draft Rule for Preliminary Adoption

LSA Document #09-615

DIGEST

Adds 327 IAC 19 concerning confined feeding operations. Repeals 327 IAC 16. Effective 30 days after filing with the Publisher.

HISTORY

First Notice of Comment Period: August 19, 2009, Indiana Register (DIN: 20090819-IR-327090615FNA)

Second Notice of Comment Period: August 11, 2010, Indiana Register (DIN: 20100811-IR-327090614SNA)

First Hearing Notice: August 11, 2010, Indiana Register (DIN: 20100811-IR-327090615PHA)

Change of First Hearing Notice: October 20, 2010, Indiana Register (DIN: 20101020-IR-327090615CHA)

SECTION 1. 327 IAC 19 IS ADDED TO READ AS FOLLOWS:

ARTICLE 19. CONFINED FEEDING OPERATIONS

Rule 1. General Provisions

327 IAC 19-1-1 Purpose

Authority: IC 13-14-8-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-18-10; IC 13-22

Sec. 1. The purpose of this article is to:

(1) impose construction and operational requirements for confined feeding operations (CFOs) in order to implement IC 13-18-10; and

(2) protect human health and the environment from threats to water quality.

(Water Pollution Control Board; 327 IAC 19-1-1)

327 IAC 19-1-2 Applicability

Authority: IC 13-14-8-1; IC 13-18-10-4

Affected: IC 13-11-2-40; IC 13-18; IC 13-22

Sec. 2. (a) This article applies to all CFOs as defined in IC 13-11-2-40.

(b) Under this article a person may not start:

(1) construction of a CFO; or

(2) expansion of a CFO that increases animal capacity or manure containment capacity, or both;

without obtaining the prior approval of the department.

(c) Unless otherwise stated, all requirements of this article must be met upon its effective date.

(Water Pollution Control Board; 327 IAC 19-1-2)

327 IAC 19-1-3 Appeal of decisions

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 4-21.5; IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 3. A decision by the commissioner to approve, deny, revoke, amend, require an approval, or impose additional requirements under this article is appealable under IC 4-21.5. Information on appeal rights shall be provided with the documentation of the commissioner's decision.

(Water Pollution Control Board; 327 IAC 19-1-3)

Rule 2. Definitions

327 IAC 19-2-1 Applicability

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 1. The definitions in IC 13-11-2 and this rule apply throughout this article.

(Water Pollution Control Board; 327 IAC 19-2-1)

327 IAC 19-2-2 "Agronomic rate" defined

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 2. "Agronomic rate" means a rate of application of manure to the land based on:

- (1) the nutrient content of the manure to be applied;**
- (2) the fertility level of the soil;**
- (3) the nutrient needs of the current or planned crops;**
- (4) the nutrient holding capacity of the soil; and**
- (5) additional sources of nutrients, including legume credits, process wastewater, biosolids, or commercial fertilizer.**

(Water Pollution Control Board; 327 IAC 19-2-2)

327 IAC 19-2-3 "Animal feeding operation" or "AFO" defined

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 3. "Animal feeding operation" or "AFO" means a lot or facility, other than an aquatic animal production facility, where all of the following conditions are met:

- (1) Animals, other than aquatic animals, have been, are, or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12-month period.**
- (2) Crops, vegetation, forage growth, or post-harvest residues are not sustained in the normal growing season over at least fifty percent (50%) of the lot or facility.**

(Water Pollution Control Board; 327 IAC 19-2-3)

327 IAC 19-2-4 "Bedrock" defined

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 4. "Bedrock" means cemented or consolidated earth materials exposed on the earth's surface or underlying unconsolidated earth materials.

(Water Pollution Control Board; 327 IAC 19-2-4)

327 IAC 19-2-5 "Commissioner" defined

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2-35; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 5. "Commissioner", as defined in IC 13-11-2-35, refers to the commissioner of the department of environmental management.

(Water Pollution Control Board; 327 IAC 19-2-5)

327 IAC 19-2-6 "Confined feeding" defined

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2-39; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 6. (a) "Confined feeding", as defined in IC 13-11-2-39, means the confined feeding of animals for food, fur, or pleasure purposes in lots, pens, ponds, sheds, or buildings where:

- (1) animals are confined, fed, and maintained for at least forty-five (45) days during any twelve (12) month period; and**
- (2) ground cover or vegetation is not sustained over at least fifty percent (50%) of the animal confinement area.**

(b) The term does not include the following:

(1) A livestock market:

(A) where animals are assembled from at least two (2) sources to be publicly auctioned or privately sold on a commission basis; and

(B) that is under state or federal supervision.

(2) A livestock sale barn or auction market where animals are kept for not more than ten (10) days.

(Water Pollution Control Board; 327 IAC 19-2-6)

327 IAC 19-2-7 "Confined feeding operation" or "CFO" defined

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 4-21.5; IC 13-11-2-40; IC 13-14; IC 13-15; IC 13-18-10; IC 13-30

Sec. 7. "Confined feeding operation" or "CFO", as defined in IC 13-11-2-40, means any:

(1) confined feeding of at least:

(A) three hundred (300) cattle;

(B) six hundred (600) swine or sheep;

(C) thirty thousand (30,000) fowl; or

(D) five hundred (500) horses;

(2) animal feeding operation electing to be subject to IC 13-18-10; or

(3) animal feeding operation that is causing a violation of:

(A) water pollution control laws;

(B) any rules of the water pollution control board; or

(C) IC 13-18-10.

A determination by the department under this subdivision is appealable under IC 4-21.5.

(Water Pollution Control Board; 327 IAC 19-2-7)

327 IAC 19-2-8 "Constructed wetland" defined

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 4-21.5; IC 13-11-2-40; IC 13-14; IC 13-15; IC 13-18-10; IC 13-30

Sec. 8. "Constructed wetland" means an approved waste management system designed to

maximize the removal of pollutants from process wastewater or other runoff through wetland vegetation uptake, retention, and settling.

(Water Pollution Control Board; 327 IAC 19-2-8)

327 IAC 19-2-9 "Construction" defined

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2-40.8; IC 13-14; IC 13-15; IC 13-18-10; IC 13-30

Sec. 9. "Construction", as defined in IC 13-11-2-40.8, for purposes of IC 13-18-10, means the fabrication, erection, or installation of a facility or manure control equipment at the location where the facility or manure control equipment is intended to be used. The term does not include the following:

- (1) The dismantling of existing equipment and control devices.**
- (2) The ordering of equipment and control devices.**
- (3) Off-site fabrication.**
- (4) Site preparation.**

(Water Pollution Control Board; 327 IAC 19-2-9)

327 IAC 19-2-10 "Contaminated runoff" defined

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 10. "Contaminated runoff" means any precipitation or surface water that has come into contact with any liquid or solid animal excreta or any used bedding, litter, or waste liquid at the CFO.

(Water Pollution Control Board; 327 IAC 19-2-10)

327 IAC 19-2-11 "Department" defined

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2-51; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 11. "Department", as defined in IC 13-11-2-51, refers to the department of environmental management.

(Water Pollution Control Board; 327 IAC 19-2-11)

327 IAC 19-2-12 "Discharge" defined

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 12. "Discharge", for purposes of this article, means any addition of any pollutant, or combination of pollutants, into any waters of the state from a point source. The term includes, without limitation, an addition of a pollutant into any waters of the state from the following:

- (1) Surface runoff that is collected or channeled by human activity.**
- (2) Discharges through pipes, sewers, or other conveyances, including natural channels, that do not lead to treatment works.**

(Water Pollution Control Board; 327 IAC 19-2-12)

327 IAC 19-2-13 "Drainage inlet" defined

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 13. "Drainage inlet" means any surficial opening to an underground tile drainage system that drains to waters of the state. For purposes of this article, the term includes water and sediment control basins.

(Water Pollution Control Board; 327 IAC 19-2-13)

327 IAC 19-2-14 "Feedlot" defined

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 14. "Feedlot" means an outside lot or pen used for confined feeding, including areas that may be covered, partially covered, or uncovered.

(Water Pollution Control Board; 327 IAC 19-2-14)

327 IAC 19-2-13 "Filter strip" defined

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 13. "Filter strip" means a relatively uniform and maintained vegetated area used for collecting sediment and cleansing runoff.

(Water Pollution Control Board; 327 IAC 19-2-13)

327 IAC 19-2-14 "Flood plain" defined

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 14. "Flood plain" means any area adjoining a river, stream, or lake that has been or may be covered by a one hundred (100) year flood.

(Water Pollution Control Board; 327 IAC 19-2-14)

327 IAC 19-2-15 "Floodway" defined

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 15. "Floodway" means the channel of a river or stream and those portions of the flood plain adjoining the channel that are reasonably required to efficiently carry and discharge the peak flood flow of a one hundred (100) year flood as determined by 310 IAC 6.

(Water Pollution Control Board; 327 IAC 19-2-15)

327 IAC 19-2-16 "Gradient barrier" defined

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 16. "Gradient barrier" means a structure or feature that prevents runoff from entering waters of the state.

(Water Pollution Control Board; 327 IAC 19-2-16)

327 IAC 19-2-17 "Ground water" defined

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 17. "Ground water" means accumulations of underground water, natural or artificial,

public and private, or parts thereof, that are wholly or partially within, flow through, or border upon this state, but excluding man-made underground storage or conveyance structures.

(Water Pollution Control Board; 327 IAC 19-2-17)

327 IAC 19-2-18 "Highly erodible land" defined

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 18. "Highly erodible land" means land that has a high potential to erode based on site-specific characteristics, such as:

- (1) slope length and steepness;**
- (2) soil erodibility; and**
- (3) rainfall;**

as defined by the USDA-NRCS and Farm Service Agency maps.

(Water Pollution Control Board; 327 IAC 19-2-18)

327 IAC 19-2-19 "Historic site" defined

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30; IC 14-8-2-125

Sec. 19. "Historic site", as defined in IC 14-8-2-125, means a site that is important to the:

- (1) general;**
- (2) archaeological;**
- (3) agricultural;**
- (4) economic;**
- (5) social;**
- (6) political;**
- (7) architectural;**
- (8) industrial; or**
- (9) cultural;**

history of Indiana. The term includes adjacent property that is necessary for the preservation or restoration of the site.

(Water Pollution Control Board; 327 IAC 19-2-19)

327 IAC 19-2-20 "Incorporation" defined

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 20. "Incorporation" means the mixing of liquid or solid manure with the surface soil using standard agricultural practices, such as tillage.

(Water Pollution Control Board; 327 IAC 19-2-20)

327 IAC 19-2-21 "Injection" defined

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 21. "Injection" means the placement of liquid manure beneath the surface of the soil in the crop root zone using equipment specifically designed for this purpose.

(Water Pollution Control Board; 327 IAC 19-2-21)

327 IAC 19-2-22 "Karst terrain" defined

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 22. "Karst terrain" means an area where karst topography, including the characteristic surface and subterranean features, has developed as the result of dissolution of limestone, dolomite, or other soluble rock. Characteristic physiographic features present in karst terrains include the following:

- (1) Sinkholes.
- (2) Sinking streams.
- (3) Caves.
- (4) Large springs.
- (5) Blind valleys.

(Water Pollution Control Board; 327 IAC 19-2-22)

327 IAC 19-2-23 "Manure" defined

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 23. "Manure" means the following:

- (1) Liquid or solid animal excreta.
- (2) Waste liquid as defined in section 45 of this rule.
- (3) Any precipitation or surface water that has come into contact with the following:
 - (A) Liquid or solid animal excreta.
 - (B) Used bedding.
 - (C) Litter.
 - (D) Liquid described in subdivision (4).
- (4) Any other materials generated at a livestock or poultry production area commingled with the materials listed in subdivisions (1) through (3).

(Water Pollution Control Board; 327 IAC 19-2-23)

327 IAC 19-2-24 "Manure application" defined

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 24. "Manure application" means the placement of liquid or solid manure by:

- (1) spraying or spreading onto the land surface;
- (2) injection below the land surface; or
- (3) incorporation into the soil.

(Water Pollution Control Board; 327 IAC 19-2-24)

327 IAC 19-2-25 "Manure storage facility" defined

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 25. "Manure storage facility" means any pad, pit, pond, lagoon, tank, building, or manure containment area used to store or treat manure, including any portions of buildings used specifically for manure storage or treatment.

(Water Pollution Control Board; 327 IAC 19-2-25)

327 IAC 19-2-26 "Manure transfer system" defined

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 26. "Manure transfer system" means any pipes, lift stations, pumps, channels, or other stationary devices used for the transfer of manure.

(Water Pollution Control Board; 327 IAC 19-2-26)

327 IAC 19-2-27 "Manure transfer vehicle" defined

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 27. "Manure transfer vehicle" means a vehicle, tank, or wagon used to move manure.

(Water Pollution Control Board; 327 IAC 19-2-27)

327 IAC 19-2-28 "Operating record" defined

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 28. "Operating record" means the written record of the CFO activities required by this article and kept by the owner/operator.

(Water Pollution Control Board; 327 IAC 19-2-28)

327 IAC 19-2-29 "Owner/operator" defined

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 29. (a) "Owner/operator", for purposes of this article, means the person:

(1) that owns the waste management systems at the CFO;

(2) that owns the livestock at the CFO and that applies for or has received an approval under this article; or

(3) in direct or responsible charge or control of one (1) or more CFOs or land application activity.

(b) The term includes contractors responsible for activities described in 327 IAC 19-1-2(b) at the CFO.

(Water Pollution Control Board; 327 IAC 19-2-29)

327 IAC 19-2-30 "Process wastewater" defined

Authority: IC 13-14-8; IC 13-14-9; IC 13-15-1-2; IC 13-15-2-1; IC 13-18-3

Affected: IC 13-11-2; IC 13-18-4

Sec. 30. "Process wastewater" means the following:

(1) Water directly or indirectly used in the operation of the AFO for any or all of the following:

(A) Spillage or overflow from animal or poultry watering systems.

(B) Washing, cleaning, or flushing any of the following:

(i) Pens.

(ii) Barns.

(iii) Manure pits.

(iv) Other AFO facilities.

(C) Direct contact swimming, washing, or spray cooling of animals.

(D) Dust control.

(2) Process wastewater includes any water that comes into contact with or is a constituent of any raw materials, products, or byproducts, including the following:

- (A) Manure.**
- (B) Litter.**
- (C) Feed.**
- (D) Milk.**
- (E) Eggs.**
- (F) Bedding.**

(Water Pollution Control Board; 327 IAC 19-2-30)

327 IAC 19-2-31 "Production area" defined

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 31. "Production area" means that part of an AFO that includes the animal confinement area, the manure storage area, the raw materials storage area, and the waste containment areas. The animal confinement area includes, but is not limited to, open lots, housed lots, feedlots, confinement houses, stall barns, free stall barns, milkrooms, milking centers, cowyards, barnyards, medication pens, walkers, animal walkways, and stables. The manure storage area includes, but is not limited to, lagoons, runoff ponds, storage sheds, stockpiles, under house or pit storages, liquid impoundments, static piles, and composting piles. The raw materials storage area includes, but is not limited to, feed silos, silage bunkers, and bedding materials. The waste containment area includes, but is not limited to, settling basins, and areas within berms and diversions that separate uncontaminated storm water. The term includes any egg washing or egg processing facility, and any area used in the storage, handling, treatment, or disposal of mortalities.

(Water Pollution Control Board; 327 IAC 19-2-31)

327 IAC 19-2-32 "Public water supply surface intake structure" defined

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 32. "Public water supply surface intake structure" means any structure used for the purpose of withdrawing surface water for use in a public water supply system.

(Water Pollution Control Board; 327 IAC 19-2-32)

327 IAC 19-2-33 "Public water supply well" defined

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 33. "Public water supply well" means any well that provides water to the public through a water distribution system that:

- (1) serves at least twenty-five (25) persons per day for:**
 - (A) drinking;**
 - (B) domestic use; or**
 - (C) other purposes; or**
- (2) has at least fifteen (15) service connections.**

(Water Pollution Control Board; 327 IAC 19-2-33)

327 IAC 19-2-34 "Registered professional engineer" defined

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30; IC 25-31

Sec. 34. "Registered professional engineer" means a professional engineer registered by the state under IC 25-31.

(Water Pollution Control Board; 327 IAC 19-2-34)

327 IAC 19-2-35 "Saturated ground" defined

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30; IC 25-31

Sec. 35. "Saturated ground" means ground so soaked with moisture that it cannot absorb any more liquid.

(Water Pollution Control Board; 327 IAC 19-2-35)

327 IAC 19-2-36 "Sensitive area" defined

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30; IC 14-31; IC 14-38-1-5

Sec. 36. "Sensitive area" means a site where conditions exist that pose a specific water quality threat to one (1) or more of the following:

- (1) Aquifers used as a source of drinking water.**
- (2) Public water supply wells.**
- (3) Wellhead protection areas.**
- (4) Drinking water supply reservoirs.**
- (5) Areas requiring special protection, such as:**
 - (A) wetlands, except for wetlands constructed for manure management;**
 - (B) karst terrains;**
 - (C) the critical habitat of an endangered species; or**
 - (D) natural areas, including:**
 - (i) parks;**
 - (ii) nature preserves, as regulated under IC 14-31;**
 - (iii) historic sites, as defined in section 19 of this rule; and**
 - (iv) public lands, as defined in IC 14-38-1-5.**

(Water Pollution Control Board; 327 IAC 19-2-36)

327 IAC 19-2-37 "Site preparation" defined

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 37. "Site preparation" means any of the following:

- (1) Demolition or wrecking of buildings or other structures.**
- (2) Clearing of building sites.**
- (3) Sale of materials from demolished structures.**
- (4) Blasting.**
- (5) Test drilling.**
- (6) Earthmoving.**
- (7) Excavating.**
- (8) Land drainage.**
- (9) Placement of access lanes or driveways.**
- (10) Installation of utilities.**
- (11) Staking or flagging.**

(Water Pollution Control Board; 327 IAC 19-2-37)

327 IAC 19-2-38 "Spill" defined

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 38. "Spill" has the meaning set forth in 327 IAC 2-6.1-4(15).

(Water Pollution Control Board; 327 IAC 19-2-38)

327 IAC 19-2-39 "Spray irrigation" defined

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 39. "Spray irrigation" means the application of manure on the land through a stationary or mobile sprinkler type system.

(Water Pollution Control Board; 327 IAC 19-2-39)

327 IAC 19-2-40 "Staging" defined

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 40. "Staging" means the temporary placement of manure at the site where the manure will be land applied.

(Water Pollution Control Board; 327 IAC 19-2-40)

327 IAC 19-2-41 "Surface application" defined

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 41. "Surface application" means the placement of manure by spraying or spreading onto the land surface.

(Water Pollution Control Board; 327 IAC 19-2-41)

327 IAC 19-2-42 "Surface water" defined

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 42. "Surface water" means water present on the surface of the earth, including:

- (1) streams;**
- (2) lakes;**
- (3) ponds;**
- (4) rivers;**
- (5) swamps;**
- (6) marshes; or**
- (7) wetlands.**

(Water Pollution Control Board; 327 IAC 19-2-42)

327 IAC 19-2-43 "Uncovered" defined

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 43. "Uncovered" means any structure that allows exposure of manure to precipitation events or to the run-on or runoff from precipitation events.

(Water Pollution Control Board; 327 IAC 19-2-43)

327 IAC 19-2-44 "Vegetative management system" defined

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 44. "Vegetative management system" means a vegetated area designed to accept contaminated runoff or waste liquid after settling for the purpose of treatment or infiltration into the soil.

(Water Pollution Control Board; 327 IAC 19-2-44)

327 IAC 19-2-45 "Waste liquid" defined

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 45. "Waste liquid" means liquid to be handled as manure that is generated at the CFO, including:

- (1) excess drinking water;**
- (2) cleanup water;**
- (3) contaminated livestock truck or trailer washwater;**
- (4) milking parlor wastewater;**
- (5) milk house washwater;**
- (6) egg washwater; or**
- (7) silage leachate.**

(Water Pollution Control Board; 327 IAC 19-2-45)

327 IAC 19-2-46 "Waste management system" defined

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 46. "Waste management system" means any approved method of managing manure or process wastewater at the CFO, including:

- (1) manure storage facilities;**
- (2) manure transfer systems;**
- (3) manure treatment systems, such as a:**
 - (A) constructed wetland;**
 - (B) vegetative management system;**
 - (C) wastewater treatment system under a valid national pollutant discharge elimination system (NPDES) permit;**
- (4) feedlots;**
- (5) confinement buildings; or**
- (6) waste liquid handling, storage, and treatment systems.**

(Water Pollution Control Board; 327 IAC 19-2-46)

327 IAC 19-2-47 "Waters" defined

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2-265; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 47. (a) "Waters", as defined in IC 13-11-2-265, means:

(1) the accumulations of water, surface and underground, natural and artificial, public and private; or
(2) a part of the accumulations of water;
that are wholly or partially within, flow through, or border upon Indiana.

(b) The term "waters" does not include:

- (1) an exempt isolated wetland;
- (2) a private pond; or
- (3) an off-stream pond, reservoir, wetland, or other facility built for reduction or control of pollution or cooling of water before discharge.

(c) The term includes all waters of the United States, as defined in Section 502(7) of the federal Clean Water Act (33 U.S.C. 1362(7)), that are located in Indiana.

(Water Pollution Control Board; 327 IAC 19-2-47)

Rule 3. Performance Standards

327 IAC 19-3-1 Performance standards

Authority: IC 13-14-8-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-18; IC 13-22

Sec. 1. (a) A CFO shall be managed so as to avoid an unpermitted discharge into waters of the state.

(b) A CFO must be constructed and operated in a manner that minimizes nonpoint source pollution entering waters of the state.

(c) A CFO shall take all reasonable steps to prevent manure releases, spills or the discharge of manure in violation of the approval or this article, including seepage and leakage.

(d) All waste management systems must be designed, constructed, and maintained to minimize leaks and seepage and prevent manure releases or spills, as well as ensure compliance with the water quality standards in 327 IAC 2.

(e) Manure that is generated or stored at a CFO and that is to be staged or applied at the CFO must be staged or applied in such a manner as:

- (1) not to enter or threaten to enter waters of the state;
- (2) to prevent:
 - (A) runoff;
 - (B) ponding for more than twenty-four (24) hours;
 - (C) manure releases; and
 - (D) spills; and
- (3) to minimize nutrient leaching beyond the root zone.

(Water Pollution Control Board; 327 IAC 19-3-1)

Rule 4. General Approval Conditions

327 IAC 19-4-1 Approval Conditions

Authority: IC 13-14-8-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-18; IC 13-22

Sec. 1. (a) CFOs must:

- (1) have a valid approval to operate; or**
- (2) close in accordance with 327 IAC 19-16.**

(b) The following conditions apply to all confined feeding approvals:

- (1) The owner/operator must comply with all terms and conditions of the approval and this article.**
- (2) The owner/operator shall take all reasonable steps to prevent, minimize, or correct any adverse impact on the environment resulting from noncompliance with the approval or this article.**
- (3) The filing by the owner/operator of a request for an approval amendment, revocation and reissuance, or revocation does not stay or suspend any approval term or condition. The approval may be amended, revoked and reissued, or revoked for causing or threatening to cause harm to the environment.**
- (4) The approval does not convey any property rights of any sort or any exclusive privilege.**
- (5) The owner/operator shall allow the commissioner, or an authorized representative (including an authorized contractor acting as a representative of the commissioner), upon the presentation of credentials and in compliance with biosecurity procedures developed by the department in consultation with the Indiana state board of animal health or individual owners/operators as defined in 327 IAC 19-2-29 to:**
 - (A) enter upon the CFO premises or where any records must be kept under the terms and conditions of the approval or this article;**
 - (B) have access for review to any records that must be kept under the terms and conditions of the approval;**
 - (C) inspect, at reasonable times:**
 - (i) any monitoring equipment or method;**
 - (ii) any waste management systems; or**
 - (iii) practices required or otherwise regulated under the approval; and**
 - (D) sample or monitor, at reasonable times, for the purpose of evaluating compliance with the approval or state and federal laws and regulations.**
- (6) The provisions of this approval are severable and, if any provision of the approval or the application of any provision of the approval to any circumstances is held invalid, the application of such provision to other circumstances and the remainder of this approval shall not be affected thereby.**

(c) If determined to be necessary to protect human health or the environment, the commissioner may require additional design standards, operational requirements, or other best management practices, such as:

- (1) monitoring systems;**
- (2) liners;**
- (3) higher compaction;**
- (4) reporting;**
- (5) certification by a registered professional engineer;**
- (6) innovative technology; or**
- (7) other protective measures.**

The commissioner shall provide written documentation describing the basis for this determination.

(Water Pollution Control Board; 327 IAC 19-4-1)

Rule 5. Alternate Design or Compliance Approach; Innovative Technology

327 IAC 19-5-1 Alternate design or compliance approach; innovative technology

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 1. (a) The use of a design or compliance approach other than the requirement specified in this article, or an innovative technology may be proposed by the owner/operator in accordance with the following:

(1) The proposal for the alternative design or compliance approach, or innovative technology must be accompanied by documentation that indicates that the performance standards in 327 IAC 19-3-1 will be met. The alternative design or compliance approach, or innovative technology must comply with all existing environmental rules and laws.

(2) The proposed design or compliance approach, or innovative technology must be incorporated into the approval.

(b) In making a determination on an alternate design or compliance approach, or innovative technology, the commissioner shall consider applicable criteria that may include the following:

(1) Design specifications that indicate adequate structural integrity.

(2) Protective measures that reduce the potential for manure releases and spills.

(3) The existence of barriers or surface gradient that directs liquid flow away from features specified for protection.

(4) Operational practices that provide additional protection.

(5) Threats of adverse impacts to water quality or other specified sensitive areas.

(6) Other criteria related to protection of the environment or human health.

(c) The commissioner shall provide written documentation describing the basis for the approval or denial of the proposed alternate design, compliance approach, or innovative technology.

(Water Pollution Control Board; 327 IAC 19-5-1)

Rule 6. Existing Confined Feeding Operations

327 IAC 19-6-1 Existing confined feeding operations

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18-10-1; IC 13-18-10-2.3; IC 13-30

Sec. 1. (a) All CFOs must be maintained and operated in compliance with all applicable:

(1) state laws; and

(2) approval conditions.

(b) The owner/operator of a CFO with an existing approval before the effective date of this article shall comply with the following requirements by the effective date of this article:

(1) Operational requirements in 327 IAC 19-13, except the owner/operator shall comply with 327 IAC 19-13-4 within ninety (90) days of the effective date of this article.

(2) Manure application requirements in 327 IAC 19-14.

(3) Manure management plan requirements in IC 13-18-10-2.3, and as described in 327 IAC 19-7-5.

(4) Closure requirements in 327 IAC 19-16.

(c) An approval amendment is required for an increase in the amount of manure generated that reduces the storage capacity to less than the required storage capacity at the time of the

most recent approval.

(d) Any increase in animal capacity or manure containment capacity requires a new application under IC 13-18-10-1 and the requirements therein.

(e) A facility that becomes a regulated CFO after the effective date of this article that contains existing waste management systems not previously regulated under this title may be required to modify them to meet the requirements of this article if necessary to protect human health and the environment. The commissioner shall provide written documentation describing the basis for any modifications.

(Water Pollution Control Board; 327 IAC 19-6-1)

Rule 7. Application Requirements

327 IAC 19-7-1 Application requirements

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18-10; IC 13-30; IC 25-17.6

Sec. 1. (a) An application under this rule is required for all CFO not previously regulated under:

- (1) this article;
- (2) 327 IAC 16 before its repeal; or
- (3) 327 IAC 5 or 327 IAC 15 before their repeal.

(b) Three (3) copies of the application package, one (1) of which may be electronic, for an approval of a CFO must be submitted to the commissioner in a format specified by the department.

(c) A complete application package must include all of the following information:

- (1) A completed application on forms provided by the department.
- (2) A plot map as described in section 2 of this rule.
- (3) A farmstead plan as described in section 3 of this rule.
- (4) A waste management system drawing as described in section 4 of this rule.
- (5) A manure management plan as described in section 5 of this rule.
- (6) Soil and water table information from test holes for proposed manure storage facilities that are conducted by a soil scientist registered under the Indiana Board of Registration of Soil Sciences, a professional geologist certified in Indiana under IC 25-17.6, or a professional engineer registered in Indiana. The number of test holes must be sufficient to adequately characterize the seasonal water table and soil. Test holes for concrete manure storage facilities must be at least two (2) feet below the base of the structure. If the manure storage facility is earthen, test holes must be:
 - (A) placed at a rate of two (2) holes for the first acre of storage and one (1) additional hole for each additional half acre of storage;
 - (B) evenly distributed throughout the storage structure;
 - (C) at least five (5) feet below the base of the structure for non-karst areas; or
 - (D) in accordance with 327 IAC 19-12-2(b)(3) in areas of karst terrain.
- (7) A description of any proposed alternative to a specific requirement in this article to demonstrate equivalent environmental and human health protection in accordance with 327 IAC 19-5.
- (8) A list of potentially affected parties, including those listed in IC 13-18-10-2, and IC 13-15-8.

- (9) A fee of one hundred dollars (\$100), in accordance with IC 13-18-10-2(a)(5).
- (10) Other plans or supplemental information that may be required by the commissioner to ensure compliance with this article. The commissioner shall provide written documentation of the basis for requiring any other plans or supplemental information.
- (11) A statement affirming that AFOs adjacent to or contiguous with the CFO are not under common ownership or control of the applicant.
- (12) Copies of any written waivers related to reduction of setback distances.

(d) Existing CFOs that are expanding must also provide a certification on a form provided by the department that enough acreage exists for land application. This certification must be submitted in writing to the department.

(e) The commissioner may deny an approval application, or place conditions on an approval:

- (1) if the CFO is, at the time of the approval application or approval decision, not in compliance with water pollution control laws, IC 13-18, or rules promulgated thereunder;
- (2) consistent with IC 13-18-10-2.1;
- (3) if the application is not on a form provided by the department or does not meet the requirements of this article.

(Water Pollution Control Board; 327 IAC 19-7-1)

327 IAC 19-7-2 Plot maps

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 2. (a) The applicant shall submit plot maps of the location proposed for approval consisting of the following:

- (1) A United States Department of Agriculture Natural Resources Conservation Service soil survey map.
- (2) A United States Geological Survey topographical map that includes identification of any public water supply wells and public water supply surface intake structures within one thousand (1,000) feet of the manure storage facilities.

(b) The maps in subsection (a) must be legible and clearly show the following:

- (1) The location of the waste management systems.
- (2) The boundaries of the property of the CFO.
- (3) The boundaries of livestock and poultry production areas.
- (4) The boundaries and owners of all manure application areas.
- (5) Available acreage for manure application after calculation of setbacks.

These maps will satisfy the requirement for maps under section 5(a)(3) of this rule.

(Water Pollution Control Board; 327 IAC 19-7-2)

327 IAC 19-7-3 Farmstead plan

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 3. (a) A farmstead plan must show all existing and proposed structures, including the approval dates for all existing structures and, within five hundred (500) feet of the waste management systems, the following known features:

- (1) Surface waters of the state.
- (2) Public and private roads.

- (3) Water well locations.
- (4) Characteristics of karst terrain.
- (5) Production area surface drainage patterns.
- (6) Property boundary line.
- (7) All outfalls of known subsurface drainage structures, including perimeter drain outfalls.
- (8) Drainage inlets, including water and sediment control basins.
- (9) Mortality management sites.

(b) In addition to the information required in subsection (a), the farmstead plan must show the diversion of uncontaminated surface water.

(c) The farmstead plan must also show the type and number of animals per structure.

(d) The farmstead plan must be legible and either:

- (1) drawn to approximate scale; or
- (2) show specific distances between the:
 - (A) waste management systems; and
 - (B) features in subsection (a) that are within five hundred (500) feet of the existing or proposed waste management system.

(e) The farmstead plan must contain reference to public roads.

(f) The farmstead plan must indicate any part of the CFO that is in a one hundred (100) year flood plain.

(g) The plan must be submitted on paper not less than eight and one-half (8 1/2) inches by eleven (11) inches in size and not more than twenty four (24) inches by thirty six (36) inches in size.

(Water Pollution Control Board; 327 IAC 19-7-3)

327 IAC 19-7-4 Waste management system drawing

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 4. The waste management system drawing must show detailed views and necessary cross sections to define all dimensions and construction materials. Systems relying on gravity flow must provide elevations of the entire waste management system that relies on gravity.

(Water Pollution Control Board; 327 IAC 19-7-4)

327 IAC 19-7-5 Manure management plan

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 5. (a) A manure management plan must be developed and submitted to the commissioner that contains the following:

- (1) Procedures for soil testing as described in subsection (c).
- (2) Procedures for manure testing as described in subsection (d).
- (3) Plot maps as described in section 2(a)(1) and 2(b) of this rule.
- (4) If applicable, the land application acreage requirements waiver, as described in 327 IAC 19-14-2(d).

(b) If applicable, the manure management plan must also contain a description of any:
(1) alternate methods proposed by the applicant for managing of the manure; and
(2) other practices to be used that assure the CFO meets the performance standards in this article.

(c) A soil test must be obtained that provides sufficient information about soil fertility to allow for nutrient recommendations including nitrogen, phosphorus, potassium and lime recommendations for existing or planned crops. Soil tests may not represent more than twenty (20) acres per sample. The frequency of this testing must:

- (1) be specified in the manure management plan; and
- (2) be conducted a minimum of once every four (4) years unless a different frequency is approved by the department in writing and is included in the manure management plan.

(d) A manure test must be obtained that provides sufficient information about the manure content to allow for nutrient recommendations for existing or planned crops and to minimize nutrient leaching. The frequency of this testing must be:

- (1) specified in the manure management plan; and
- (2) conducted a minimum of once every year.

(e) Manure samples must be representative of the manure that is land applied. If manure is mixed from separate manure storage facilities prior to land application, a composite sample may be taken. If manure is land applied from separate and distinct storage, a sample must be taken from each.

(f) A manure management plan must be submitted to the department at least one (1) time every five (5) years and with any approval application and renewal application to maintain a valid approval for the CFO. A copy of the current manure management plan must be maintained in the operating record.

(Water Pollution Control Board; 327 IAC 19-7-5)

327 IAC 19-7-6 Mortality management

Authority: IC 13-13-5-1; IC 13-15-1-2; IC 13-15-2-1

Affected: IC 13-18-10

Sec. 6. (a) CFOs must carry out proper management of dead livestock as required by 345 IAC 7-7 to ensure that there shall be no discharge of mortality or liquids that have been in contact with mortality to waters of the state and no disposal in a manure storage facility that is not specifically designed to treat animal mortalities.

(b) Mortality composting sites must meet all of the following criteria:

- (1) Be constructed and operated to prevent:
 - (A) leachate, either through the use of earthen compaction or a concrete pad; and
 - (B) rodents, domestic, and wild animals from accessing the compost pile.
- (2) Be constructed and operated to prevent run-on and runoff of storm water.
- (3) Comply with setbacks listed in 327 IAC 19-12-3.

(Water Pollution Control Board; 327 IAC 19-7-6)

Rule 8. Approval Process

327 IAC 19-8-1 Duration of approvals

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 1. An approval shall be effective for a fixed term. That term begins when the approval is issued and is not to exceed five (5) years. An approval may be amended, revoked and reissued, or revoked prior to the expiration of the term for cause, as specified in sections 3 and 5 of this rule, or in accordance with conditions set forth in the approval. In no event may the term of an approval be extended beyond five (5) years from its original effective date by amendment, extension, or other means, except as provided in section 2(a) of this rule.

(Water Pollution Control Board; 327 IAC 19-8-1)

327 IAC 19-8-2 Approval renewals

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 4-21.5; IC 13-11-2; IC 13-14; IC 13-15; IC 13-18-10-2.3; IC 13-30-3

Sec. 2. (a) If the owner/operator wishes to continue the activity regulated by the approval after the expiration date of the approval, the owner/operator shall apply for and obtain an approval renewal. The terms and conditions of an expired approval are automatically extended in full force and effect until the effective date of a renewal, if the:

- (1) owner/operator has submitted a timely and complete application for an approval renewal under this article at least thirty (30) days prior to the expiration of the approval; and**
- (2) commissioner, through no fault of the owner/operator, does not issue an approval renewal prior to the expiration date of the previous approval.**

(b) In accordance with IC 13-18-10-2.3, an updated manure management plan must be submitted once every five (5) years, along with the additional information required in subsection (c), at least thirty (30) days prior to the expiration of the approval. Approval renewals shall be issued for a fixed term beginning with the submittal date and are not to exceed five (5) years.

(c) The application for approval renewal must be on a form provided by the department and contain the following:

- (1) An updated manure management plan in accordance with 327 IAC 19-7-5.**
- (2) A current farmstead plan, as described in 327 IAC 19-7-3.**
- (3) A minimum number of acres for manure application, as described in 327 IAC 19-14-2(a).**

(Water Pollution Control Board; 327 IAC 19-8-2)

327 IAC 19-8-3 Amendments and notifications

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15-7-1; IC 13-18-10-2.1; IC 13-30

Sec. 3. (a) The department may issue amendments to approvals of a CFO at any time:

- (1) under IC 13-18-10-2.1(i);**
- (2) at the request of the applicant to address changes at the CFO that do not require a new approval; or**
- (3) due to an increase in the amount of manure generated that reduces the storage capacity to less than the required storage capacity at the time of the most recent approval.**

(b) The owner/operator must submit written notification to the department of any changes to the operation as approved. The department will review the changes and decide if amendments are necessary. At any time the department may decide an amendment is necessary, and the owner/operator must comply with the amended approval.

(Water Pollution Control Board; 327 IAC 19-8-3)

327 IAC 19-8-4 Denials

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18-10; IC 13-30

Sec. 4. (a) Denial of an application shall result from failure to:

- (1) be in compliance with all current approval conditions during departmental review; or
- (2) submit a complete application after receipt of two (2) notices of the same deficiency on the new or renewal application.

(b) All CFOs are subject to 327 IAC 19-7-1(e), as well as the conditions listed in this section.

(Water Pollution Control Board; 327 IAC 19-8-4)

327 IAC 19-8-5 Revocation

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18-10; IC 13-30-3-11

Sec. 5. (a) The commissioner may revoke an approval or a condition of an approval as a result of a violation of:

- (1) water pollution control laws;
- (2) rules adopted under the water pollution control laws;
- (3) IC 13-18-10;
- (4) this article; or
- (5) approval conditions.

(b) The commissioner may revoke an approval or condition or modify the terms of an approval through an order of the commissioner under IC 13-30-3-11.

(c) The commissioner shall provide written documentation of the basis for revoking an approval or a condition of an approval.

(d) Revocation of approval may happen at any time a violation is discovered, regardless of when the violation actually occurred.

(Water Pollution Control Board; 327 IAC 19-8-5)

327 IAC 19-8-6 Transferability

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 6. (a) When ownership of a CFO is transferred, the parties completing the transaction shall request transfer of the approval from the department. This request must include a written agreement that is submitted to the commissioner within ninety (90) days of the transfer and must contain the following:

- (1) A specific date for transfer of approval responsibilities.
- (2) Identification of responsibility for any violations existing at the time of the transfer.

(b) Failure to comply with subsection (a) shall result in the following:

- (1) Revocation of the existing CFO approval and possible penalties for operating without a valid approval.
- (2) The necessity of the new owner/operator to submit an application for a new approval under 327 IAC 19-7-1.

(Water Pollution Control Board; 327 IAC 19-8-6)

327 IAC 19-8-7 Public comment periods and notifications

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18-10-1; IC 13-30

Sec. 7. (a) An applicant who applies for approval under IC 13-18-10-1 to construct or expand a CFO on land for which a valid existing approval has not been issued shall make a reasonable effort to provide notice not more than ten (10) working days after submitting an application:

(1) to the county executive of the county in which the CFO is to be located or expanded; and

(2) to each owner and each occupant of land of which any part of the boundary is one-half (1/2) mile or less from the following:

(A) Any part of the proposed footprint of either or both of the following to be located on the land on which the CFO is to be located:

(i) A livestock or poultry production structure.

(ii) A permanent manure storage facility.

(B) Any part of the proposed footprint of either or both of the following to be located on the land on which the CFO is to be expanded:

(i) A livestock or poultry production structure.

(ii) The expanded area of a livestock or poultry production structure.

The notice must be completed on forms provided by the commissioner, sent by mail, be in writing, include the date on which the application was submitted to the department, and include a brief description of the subject of the application. The notice must also include the dates comments will be accepted by the department in subsection (b). The applicant shall pay the cost of complying with this subsection. The applicant shall submit an affidavit to the department that certifies that the applicant has complied with this subsection, as well as submit a copy of the state form to the department that was sent to persons in this subsection.

(b) The department shall accept written comments for a thirty three (33) day period following the date of mailing of the notice required under subsection (a).

(c) A public meeting on an approval application may be held at the commissioner's discretion in appropriate cases where environmental concerns relevant to applicable rules or laws are raised.

(Water Pollution Control Board; 327 IAC 19-8-7)

Rule 9. Operating Record

327 IAC 19-9-1 Requirements

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18-10; IC 13-30

Sec. 1. (a) All valid approvals, amendments, renewals, and notifications relevant to the approvals must be:

(1) added to the operating record in accordance with required time frames established in this article and IC 13-18-10; and

(2) maintained and updated in the operating record.

(b) The operating record must also contain all records from the following, if applicable:

(1) 327 IAC 19-7-1(c) and (d), all requirements within the current version of the complete

application.

(2) 327 IAC 19-7-3, the farmstead plan.

(3) 327 IAC 19-7-5, the manure management plan.

(4) 327 IAC 19-10, a ground water monitoring plan.

(5) 327 IAC 19-11-2(c), the storm water management certification.

(6) 327 IAC 19-12-4(d), certification by a registered professional engineer.

(7) 327 IAC 19-12-4(r) and 327 IAC 19-12-4(s), regarding construction requirements.

(8) 327 IAC 19-13-1(d), regarding completed self-monitoring records for five (5) years.

(9) 327 IAC 19-13-4, the current emergency response plan, and documentation of any spill response implemented by CFO personnel within the past five (5) years.

(10) 327 IAC 19-14-2(a), regarding minimum acreage records.

(11) 327 IAC 19-14-3(b), justification of nitrogen losses.

(12) 327 IAC 19-14-3(f), regarding land application records for five (5) years.

(13) 327 IAC 19-14-4(h), regarding emergency land application of manure.

(14) 327 IAC 19-14-5, a spray irrigation plan.

(15) 327 IAC 19-14-6(d), regarding land application monitoring activities.

(16) 327 IAC 19-14-7(c), regarding marketing and distribution records for five (5) years.

(17) A land use agreement, which must include the following:

(A) The location of fields.

(B) Available acreage after calculation for setbacks.

(C) The signature of the owner of the property on which manure will be applied.

(18) Documentation of maintenance activities on manure storage facilities.

(19) Copies of any written waivers related to reduction of the set back distances.

(20) All required permits issued by the department.

(Water Pollution Control Board; 327 IAC 19-9-1)

Rule 10. Ground Water Monitoring

327 IAC 19-10-1 Ground water monitoring

Authority: IC 13-13-5-1; IC 13-15-1-2; IC 13-15-2-1

Affected: IC 13-18-10

Sec. 1. (a) Ground water monitoring may be required on a case by case basis based on:

(1) proximity of ground water aquifer to waste management systems; or

(2) soil types.

All CFOs required to conduct ground water monitoring must comply with the requirements of this section.

(b) Owners/operators of a manure storage facility shall develop and follow a written ground water monitoring plan. This plan must:

(1) be approved by the department;

(2) be kept in the operating record; and

(3) include:

(A) monitoring parameters, including:

(i) field pH;

(ii) field specific conductance;

(iii) total Kjeldahl nitrogen;

(iv) chloride;

(v) fecal coliform bacteria;

(vi) phosphate;

(vii) sulfate; and

- (viii) total organic carbon;
- (B) monitoring frequency;
- (C) sample collection method and identification;
- (D) sample preservation and shipment, including field quality control;
- (E) analytical procedures, including:
 - (i) method detection limits; and
 - (ii) practical quantitation limits;
- (F) chain of custody control; and
- (G) a description of how the owner/operator shall determine whether there is a statistically significant increase over background values for each parameter monitored, with the exception of field pH and field specific conductance. The owner/operator shall make these statistical determinations each time the owner/operator collects samples.

(c) If the owner/operator determines under subsection (b)(3)(G) that there is a statistically significant increase for parameters at any monitoring device, the owner/operator shall notify the commissioner of this finding in writing within fourteen (14) days. The notification must indicate what parameters have shown statistically significant increases over background levels. The department may then require corrective action.

(d) Owners/operators must submit the results of ground water monitoring to the department within sixty (60) days of sampling.

(e) Required monitoring must be conducted throughout the active life of the storage facility. Ground water monitoring may be extended beyond the active life of the manure storage facility if a corrective action program is being conducted at the facility.

(Water Pollution Control Board; 327 IAC 19-10-1)

Rule 11. Storm Water Management

327 IAC 19-11-1 Applicability

Authority: IC 13-13-5-1; IC 13-15-1-2; IC 13-15-2-1

Affected: IC 13-18-10

Sec. 1. (a) All CFOs that are defined as concentrated animal feeding operations (CAFOs) in 40 CFR 122.23(b)(2) and all CAFOs with a NPDES permit must meet the storm water pollution prevention plan requirements in 40 CFR 122.23(e).

(b) All CFOs not defined as a CAFO in subsection (a) must comply with section 2 of this rule.

(Water Pollution Control Board; 327 IAC 19-11-1)

327 IAC 19-11-2 Storm water management

Authority: IC 13-13-5-1; IC 13-15-1-2; IC 13-15-2-1

Affected: IC 13-18-10

Sec. 2. (a) Storm water management must consider the following:

(1) All activities and significant materials that may reasonably be expected to add significant amounts of pollutants to storm water draining from the facility.

(2) The potential pollutant sources from the following activities:

(A) Immediate access roads and rail lines used or traveled by carriers of raw materials, waste material, or byproducts used or created by the facility.

(B) Refuse sites.

(C) Sites used for the storage and maintenance of material handling equipment.

(D) Shipping and receiving areas.

The description should specifically list any significant potential source of pollutants at the site.

(3) Types of materials handled at the site that potentially may be exposed to precipitation, including the following:

(A) Materials that are treated, stored, or disposed of in a manner to allow exposure to storm water where that exposure may release contaminants into the storm water.

(B) The method and location of on-site storage or disposal of significant materials.

(C) Paved, dirt, or gravel parking areas for storage of vehicles to be maintained.

(D) Materials management practices employed to minimize contact of materials with storm water runoff.

(E) The location and description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff.

(F) A description of any treatment the storm water receives, including the ultimate disposal of any solid or liquid wastes.

(b) The following storm water management practices must be implemented:

(1) Good housekeeping. All areas that may contribute pollutants to storm water discharges should be maintained in a clean, orderly manner.

(2) Preventative maintenance. A preventative maintenance program including timely inspection and maintenance schedule of storm water management devices.

(3) Inspections. Self-monitoring inspections conducted as permit conditions require including records of inspection of storm water control devices and measures implemented. Records of inspection shall be maintained in the farm operating record.

(4) Sediment and erosion control. Identify areas that, due to topography, activities, or other factors, have a high potential for significant soil erosion and identify structural, vegetative, and/or stabilization measures to be used to limit erosion.

(5) Management of storm water runoff. Practices (other than those that control the generation or source or sources of pollutants) used to divert, infiltrate, reuse, or otherwise manage storm water runoff so as to reduce pollutants in storm water discharges from the site.

(c) The owner/operator of the CFO must complete a certification on a form provided by the department that the requirements of this section have been met. This certification must be kept in the operating record.

(d) If the implemented storm water pollution prevention practices are deemed ineffective by the department, the commissioner may require additional measures to be taken. The commissioner shall provide written documentation describing the basis for any required changes.

(Water Pollution Control Board; 327 IAC 19-11-2)

Rule 12. Manure Handling and Storage; Site, Design, and Construction Requirements for Waste Management Systems

327 IAC 19-12-1 Applicability and availability of standards

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 1. (a) This rule applies to waste management systems approved for construction after the effective date of this article.

(b) Indiana NRCS conservation practice standards and construction specifications are available from the Natural Resources Conservation Service, Indiana Field Office, 6013 Lakeside Boulevard, Indianapolis, Indiana 46278-2933 or online at <http://www.in.nrcs.usda.gov/>. The standards may be viewed and copied at IDEM Office of Land Quality, 100 North Senate Avenue, Eleventh Floor, Indianapolis, Indiana.

(Water Pollution Control Board; 327 IAC 19-12-1)

327 IAC 19-12-2 Site restrictions

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 2. (a) Waste management systems must not be constructed:

(1) except for subsection (b), in karst terrain based on information compiled by the department, and from karst and bedrock maps from the Indiana Geological Survey dated 1997;

(2) in a floodway;

(3) in a one hundred (100) year flood plain, unless all waste management system access is at least two (2) feet above the one hundred (100) year flood plain and structurally sound without lowering flood waters or the seasonal water table below the bottom of the waste management system;

(4) over mines; or

(5) in soil types that are expected to have a seasonal high water table, unless the water table is lowered to keep the water table below the bottom of the waste management system.

(b) The commissioner may approve a waste management system to be constructed in karst terrain based upon the following site-specific information submitted to the commissioner:

(1) Characterization of the seasonal water table and soil.

(2) Design and construction specifications that assure adequate structural integrity and environmental protection.

(3) For manure storage facilities that are earthen, in addition to 327 IAC 19-7-1(c)(6), information from at least one (1) of the soil borings or test holes to the shallower of either:

(A) bedrock; or

(B) ten (10) feet below the lowest point of the proposed waste management system.

(4) Other information that the commissioner deems necessary to ensure protection of human health and the environment.

(Water Pollution Control Board; 327 IAC 19-12-2)

327 IAC 19-12-3 Setbacks

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 3. (a) For purposes of this section, waste management systems must use the largest setback that is applicable.

(b) Waste management systems must be located to maintain the minimum setback distances from the following features that are known and identifiable at the time an application is submitted for approval:

(1) One thousand (1,000) feet from a public water supply well or public water supply surface intake structure.

- (2) Except for subsection (c), three hundred (300) feet from:
 - (A) surface waters of the state;
 - (B) drainage inlets, including water and sediment control basins;
 - (C) sinkholes, as measured from the surficial opening or the lowest point of the feature; and
 - (D) off-site water wells.
- (3) One hundred (100) feet from:
 - (A) on-site water wells;
 - (B) property lines; and
 - (C) public roads.
- (4) Four hundred (400) feet from existing off-site residential and public buildings.

(c) A manure storage facility that contains solids must be maintained to have a minimum setback of one hundred (100) feet from the features in subsection (b)(2).

(d) If one (1) of the features in subsection (b) is constructed within the specified setback distances to an existing waste management system, a new waste management system may be constructed to maintain the same setback between the existing waste management system and the feature, providing that the feature was:

- (1) not under the control of the owner/operator of the CFO; and
- (2) constructed after the application for original waste management system was submitted to the department.

(e) The owner/operator may obtain a reduced setback under 327 IAC 19-5 by demonstrating to the commissioner that a different compliance approach meets the performance standards in 327 IAC 19-3-1.

(f) The property line setback distances in this section may be waived in writing by the owner of the adjoining property.

(Water Pollution Control Board; 327 IAC 19-12-3)

327 IAC 19-12-4 Storage capacity and design requirements

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 4. (a) An alternate design may be approved by the commissioner if it is shown to provide an equivalent amount of environmental protection.

(b) All waste management systems must be designed to not discharge to surface waters of the state. If a waste management system discharges or is designed to discharge, a NPDES CAFO permit under 40 CFR 122.23 is required.

(c) All manure storage facilities for the CFO must be designed, constructed, and maintained with a combined storage capacity of at least one hundred eighty (180) days storage for the following:

- (1) All materials entering the manure storage facility.
- (2) If applicable, the expected precipitation and runoff from a twenty-five (25) year, twenty-four (24) hour precipitation event that falls on the drainage area around the manure storage facility that contains liquid.

Calculations for manure excretion characteristics must be based on ASAE D384.2: Manure Production and Characteristics, March 2005, available from the American Society of Agricultural

and Biological Engineers, 2950 Niles Road, St. Joseph, Michigan 49085-9659, or online at http://evo31.ae.iastate.edu/ifafs/doc/pdf/ASAE_D384.2.pdf.

(d) All manure storage facilities must be constructed according to the Indiana NRCS Conservation Practice Standard Code 313: Waste Storage Facility, September 2005. Construction of all manure storage facilities must be certified upon completion by a registered professional engineer on a form provided by the department and kept in the operating record.

(e) In addition to subsection (d), all concrete manure storage facilities must be constructed according to the following design standards:

(1) MWPS-36: Rectangular Concrete Manure Storages, 2005*; or

(2) TR-9: Circular Concrete Manure Tanks, March 1998*.

All concrete structures must be constructed according to the Indiana NRCS Construction Specification, Concrete Construction, October 2005, available online at <http://www.in.nrcs.usda.gov/technical/engineering/ConsSpecifications/pdf/concconstr.pdf>.
*Available from MidWest Plan Service, 122 Davidson Hall, Iowa State University, Ames, Iowa 50011-3080.

(f) In addition to subsection (d), all earthen manure storage facilities must be constructed according to the Indiana NRCS Conservation Practice Standard Code 359: Waste Treatment Lagoon, September 2005.

(g) Manure storage facilities that contain solids may not be constructed in sand or gravel soils, Unified Soil Classification of Pt, GW, GP, GM, GC, SW, SP, SM, as described in ASTM D2488-09a Standard Practice for Description and Identification of Soils (Visual-Manual Procedure), available from ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA, 19428-2959, unless specially designed with an approved liner, in accordance with section 5 of this rule.

(h) Waste management systems not specifically listed in this section must be designed and constructed in accordance with the requirements of IC 13-18-10-4(b). The design must be submitted to the department for approval under subsection (a) before construction can commence.

(i) Pipelines must be constructed according to the Indiana NRCS Conservation Practice Standard Code 516: Pipeline, November 2009.

(j) Installation of underground steel storage tanks for manure is prohibited.

(k) Plastic and fiberglass tanks and aboveground steel tanks must comply with the following:

(1) Tanks must have sufficient strength to withstand design loads.

(2) All tanks must be watertight.

(3) Tanks used to store other substances must be cleaned to remove any traces of other chemicals prior to addition of manure to the tank.

(4) Tanks must be designed and installed to ensure the seasonal high water table is maintained below the tank or the tank must be anchored to prevent flotation.

(5) Aboveground tanks must have protected shut-off valves for all inlet and outlet pipes.

(l) Vegetative management systems must be constructed according to the Indiana NRCS Conservation Practice Standard Code 635: Vegetated Treatment Area; October 2008.

(m) Constructed wetlands must be constructed according to the Indiana NRCS Conservation Practice Standard Code 656: Constructed Wetland; October 2006.

(n) Any drainage system to lower a seasonal water table around the base of a waste management system must be equipped with an access point for sampling within fifty (50) feet of the waste management system.

(o) Any drainage system to lower the seasonal water table around the base of a waste management system must be designed and installed to:

- (1) effectively collect and drain the ground water;
- (2) be of adequate size, proper slopes, and proper distance from the waste management system;
- (3) be provided with sumps, pumps (including a backup pump), and electricity supply, if applicable;
- (4) have an outlet that is at least fifty (50) feet away from the building, and at least:
 - (A) fifty (50) feet from the property line in soils with a permeability of one-half (1/2) inch per hour or less; or
 - (B) twenty (20) feet from the property line in soils with a permeability greater than one-half (1/2) inch per hour; and
- (5) have a shut-off valve or equivalent.

(p) Any field tiles or drainage outlets encountered during construction must be cut back at least fifty (50) feet from the edge of a berm or concrete pit or earthen structure and blocked or rerouted.

(q) The commissioner may incorporate conditions into the approval that require testing to verify that the manure storage facility is consistent with the design and performance standards established in this article.

(r) The owner/operator shall notify the commissioner in writing two (2) days prior to scheduled construction of a waste management system. If an owner/operator completes construction of an approved waste management system and wishes to utilize that portion prior to finishing construction of the entire facility, multiple notices shall be submitted.

(s) The applicant shall execute and send to the commissioner an affidavit, under penalty of perjury, that a waste management system was constructed, and shall be operated, in accordance with the requirements of the approval and this article. The owner/operator must submit to IDEM, on a form provided by the department, the affidavit within thirty (30) days after the date construction of an approved waste management structure is completed, and prior to the introduction of any animals or manure. The affidavit must be completed, notarized, and returned to IDEM assuring that the waste management system was constructed and shall be operated in accordance with the requirements of the approval. The affidavit must also include identification of what parts of the waste management system are completed at the time of submittal. If an owner/operator performs partial construction of an approved facility and wishes to utilize that portion prior to completing construction of the entire facility, multiple affidavits shall be submitted. No portion of a waste management system, including animal feed and similar feedstock storage areas, shall be utilized unless that portion, or a combination of the waste management system for that portion, is completely constructed prior to the introduction of animals and provides a minimum of one hundred eighty (180) days storage for manure, wastewater, and/or leachate.

(Water Pollution Control Board; 327 IAC 19-12-4)

327 IAC 19-12-5 Design requirements for liners

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 5. (a) The soil or foundation of a manure storage pond or manure treatment lagoon shall have a maximum specific discharge of $1/16 \text{ in}^3/\text{in}^2/\text{day}$ ($1.8 \times 10^{-6} \text{ cm}^3/\text{cm}^2/\text{sec}$). This requirement may be satisfied by soil testing that shows a minimum of three (3) feet of in situ soils that meet the maximum specific discharge criteria. The soil must be over-excavated a minimum of six (6) inches and recompacted to break up the existing macropore structure.

(b) If there is not at least three (3) feet of in situ soils that meet the maximum specific discharge criteria in subsection (a), a liner must be used. Except in subsection (c), liners used in manure storage facilities must meet the following design standards:

(1) Indiana NRCS Conservation Practice Standard Code 521A: Pond Sealing or Lining, Flexible Membrane, October 2006;

(2) Indiana NRCS Conservation Practice Standard Code 521B: Pond Sealing or Lining, Soil Dispersant, October 2006; or

(3) Indiana NRCS Conservation Practice Standard Code 521C: Pond Sealing or Lining, Bentonite Sealant, October 2006.

(c) Clay liners shall be a minimum of one foot thick and have a maximum specific discharge of $1/16 \text{ in}^3/\text{in}^2/\text{day}$ ($1.8 \times 10^{-6} \text{ cm}^3/\text{cm}^2/\text{sec}$).

(Water Pollution Control Board; 327 IAC 19-12-5)

Rule 13. Manure Handling and Storage; Operational Requirements

327 IAC 19-13-1 Maintenance requirements

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 1. (a) All waste management systems and application equipment must be maintained and operated to meet the approval conditions.

(b) Management of liquid and solid manure must be in compliance with the following:

(1) This article.

(2) The CFO approval.

(3) All applicable state and federal laws.

(c) Manure at the production area must be stored in an approved waste management system until removed for land application in accordance with 327 IAC 19-14.

(d) If uncovered, liquid manure storage facilities must be maintained with a minimum freeboard of two (2) feet or as specified in the approval conditions.

(e) Uncovered liquid manure storage facilities must have clearly identified markers to indicate manure levels relative to the approved freeboard elevation.

(f) The owner/operator shall inspect all waste management systems for compliance with this article and the approval conditions and, if applicable, freeboard measures as specified in the approval, at least one (1) time each week. Completed self-monitoring records must be kept in

the operating record.

(g) All earthen berms for manure storage facilities must be:

- (1) stabilized with vegetation or alternative erosion control measures; and
- (2) maintained to allow for visual inspection and prevent growth of trees and shrubs.

(h) An owner/operator with an approved vegetative management system must operate and maintain the vegetative management system to provide effective treatment in accordance with the approval.

(i) Migration of solids from contaminated runoff from any feedlot is prohibited unless directed to an approved manure storage facility.

(j) Provisions shall be made for periodic removal of accumulated solids to preserve storage capacity. The anticipated method for doing this must be considered in planning, particularly in determining the configuration of ponds and type of liner, if any.

(Water Pollution Control Board; 327 IAC 19-13-1)

327 IAC 19-13-2 Digesters and other energy recovery systems

Authority: IC 13-14-8-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14-12; IC 13-18; IC 13-30

Sec. 2. Any manure digester or energy recovery system located at a CFO or CAFO must obtain applicable registrations from the department's solid waste program.

(Water Pollution Control Board; 327 IAC 19-13-2)

327 IAC 19-13-3 Transport and handling

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 3. Pumping, dumping, or allowing the leakage or drainage of manure from a manure transfer vehicle onto unauthorized premises, public thoroughfares, or into waters of the state is prohibited.

(Water Pollution Control Board; 327 IAC 19-13-3)

327 IAC 19-13-4 Emergency response plan

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 4. (a) The owner/operator of a CFO shall develop an emergency response plan to be kept in the operating record. The plan shall contain the following:

(1) Procedures for the following:

- (A) Containing a manure release to prevent it from reaching waters of the state.**
- (B) Locating the source of the manure release and stopping the flow of manure or waste liquids.**
- (C) Returning released manure or waste liquids to an approved waste management system.**
- (D) Land applying released manure in accordance with rule 14 of this article.**
- (E) Contacting the following:**
 - (i) The owner/operator.**
 - (ii) Any applicable local emergency or health authorities.**

- (2) The names and telephone numbers of persons who are identified by the owner/operator as responsible for implementing the emergency response plan.
- (3) Areas where potential manure releases can occur and their accompanying drainage points.
- (4) Identification of equipment and cleanup materials to be used in the event of a manure release.

(b) The owner/operator must implement the emergency response plan anytime a manure release occurs. If a manure release reaches waters of the state, the owner/operator must also comply with subsection (c).

(c) If a spill reaches waters of the state, the following procedures must be followed:

(1) As soon as possible, but within two (2) hours of discovery, communicate a spill report to the Department of Environmental Management, Office of Land Quality, Emergency Response Section: (888) 233-7745 for in-state calls (toll free) or (317) 233-7745 for out-of-state calls. If new or updated spill report information becomes known that indicates a significant increase in the likelihood of damage to the waters of the state, the responsible party shall notify the department as soon as possible but within two (2) hours of the time the new or updated information becomes known.

(2) Submit to the Indiana Department of Environmental Management, Office of Land Quality, Emergency Response Section (MC 66-30), 2525 N. Shadeland Avenue., Suite 100, Indianapolis, IN 46219-1787, a written copy of the spill report if requested in writing by the department.

(3) Except from modes of transportation other than pipelines, exercise due diligence and document attempts to notify the following:

(A) For manure releases or spills to surface water that cause damage, the nearest affected downstream water user located within ten (10) miles of the spill and in the state of Indiana.

(B) For manure releases or spills to soil outside the facility boundary, the affected property owner or owners, operator or operators, or occupant or occupants.

(Water Pollution Control Board; 327 IAC 19-13-4)

Rule 14. Land Application of Manure

327 IAC 19-14-1 Applicability

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 1. Land application of manure, litter, or process wastewater to land that is:

(1) owned by the permittee;

(2) rented by the permittee; or

(3) utilized by the permittee under an agreement for land use;

shall be done in accordance with the requirements of this rule.

(Water Pollution Control Board; 327 IAC 19-14-1)

327 IAC 19-14-2 Required acreage for manure application

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 2. (a) All CFOs must maintain a minimum number of acres for manure application based on manure application rates from section 3 of this rule. This must be:

- (1) documented in the operating record at all times; and
- (2) included in all applications required under IC 13-18-10-1(2).

(b) Any acreage utilized for the application of manure that is not owned by the owner of the CFO must be documented in the operating record via land use agreements as described in 327 IAC 19-9-1(a)(17).

(c) If the applicant can demonstrate to the satisfaction of the commissioner that a smaller amount of acreage can be used and is equally protective of human health and the environment, the commissioner may approve the different amount of acreage based on site-specific criteria submitted with the application package, including:

- (1) type of manure generated;
- (2) alternate methods of managing manure;
- (3) innovative technology;
- (4) the marketing and distribution of manure as described in 327 IAC 19-14-7; or
- (5) other criteria related to protection of human health or the environment.

(d) Copies of any written waivers related to reduction of the property line setback distances must be kept in the operating record.

(Water Pollution Control Board; 327 IAC 19-14-2)

327 IAC 19-14-3 Manure application rates

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18-10; IC 13-30

Sec. 3. (a) The owner/operator of a CFO shall have the results of a soil test prior to any land application events, as well as a manure test. Soil and manure tests shall be conducted in accordance with the manure management plan that is submitted to the commissioner to meet the requirement in 327 IAC 19-7-1(c)(5).

(b) The application rate of nitrogen (N) must not exceed the N requirements based on the Purdue University Cooperative Extension Service publication ID-101: Animal Manure as a Plant Nutrient Resource, February 2001, available from the Cooperative Extension Service, Purdue University, West Lafayette, Indiana 47907, of current or planned crops of the upcoming growing season as documented in the operating record. Minimum N loss estimates must be used unless otherwise justified; this justification must be kept in the operating record.

(c) For the first manure application only, nutrient content of manure from facilities constructed after the effective date of this article shall be based on either:

- (1) manure test values as described in 327 IAC 19-7-5(d); or
- (2) values in the NRCS Agricultural Waste Management Field Handbook (AWMFH) Chapter 4, April 1992, available from the Natural Resources Conservation Service, West National Technology Support Center, 1201 NE Lloyd Boulevard, Suite 1000, Portland, OR 97232 or online at <http://www.wsi.nrcs.usda.gov/products/w2q/awm/handbk.html> and applied at fifty percent (50%) of the rate listed in subsection (b).

For all subsequent manure application events, nutrient content values must be based on manure test values.

(d) As of the effective date of this article the following must comply with the phosphorus application rates in Table 1:

- (1) Large CAFOs as defined in 40 CFR 122.23(b);

(2) CAFOs with a NPDES permit.

(3) CFOs approved for initial construction after the effective date of this article.

Table 1.

**PHOSPHORUS APPLICATION RATES FOR LARGE CAFOs AND CFOs APPROVED FOR CONSTRUCTION
AFTER THE EFFECTIVE DATE OF THIS ARTICLE**

Soil test level (ppm)	Application rate
0-50	N based
51-100	1.5 x P crop removal
101-200	1.0 x P crop removal
201+	0

(e) Beginning with the effective date of this article, CFOs not listed in subsection (c) must comply with the phosphorus application rates in Table 2:

Table 2.

PHOSPHORUS APPLICATION RATES FOR ALL OTHER CFOs

Soil test level (ppm)	YEAR			
	1-2	3-4	5-6	7+
0-50	N based	N based	N based	N based
51-100	1.5 x P crop removal	1.5 x P crop removal	1.5 x P crop removal	1.5 x P crop removal
101-200	1.0 x P crop removal	1.0 x P crop removal	1.0 x P crop removal	1.0 x P crop removal
201-250	0.9 x P crop removal	0.75 x P crop removal	0.75 x P crop removal	0
251-275	0.9 x P crop removal	0.75 x P crop removal	0.5 x P crop removal	0
276-300	0.9 x P crop removal	0.75 x P crop removal	0.25 x P crop removal	0
301-350	0.7 x P crop removal	0.5 x P crop removal	0	0
351-400	0.7 x P crop removal	0.25 x P crop removal	0	0
401+	0	0	0	0

(f) The following information must be added to the operating record as needed in accordance with required time frames established in this article and IC 13-18-10 and must be maintained and updated in the operating record:

(1) Expected crop yields.

(2) The date or dates manure, litter, or process wastewater is applied to each field.

(3) Precipitation events at the time of application and for twenty-four (24) hours prior to and following application.

(4) Test methods used to sample and analyze manure, litter, process wastewater, and soil.

(5) Results from manure, litter, process wastewater, and soil sampling.

(6) An explanation of the basis for determining manure, litter, and process wastewater application rates.

(7) Calculations showing the manure nitrogen and phosphorus to be applied to each field.

(8) Total amount of nitrogen and phosphorus actually applied to each field, including documentation of calculations for the total amount applied.

(9) The method used to apply the manure, litter, or process wastewater.

(10) The date or dates of manure, litter, and process wastewater application equipment inspection.

(11) USDA soil survey maps of currently available land application sites.

(12) The type of manure applied.

(13) A written conservation plan with an explanation of conservation practices used must be completed and implemented prior to land application on highly erodible land, if required in section 4(j) of this rule. CAFOs with a NPDES permit must have a nutrient management plan prior to land application on highly erodible land.

(Water Pollution Control Board; 327 IAC 19-14-3)

327 IAC 19-14-4 Manure application activities

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 4. (a) Manure that is staged at the manure application site for more than seventy-two (72) hours must be:

- (1) covered or adequately bermed to prevent run-on or runoff;
- (2) applied to the site within ninety (90) days;
- (3) set back from property lines and public roads one hundred (100) feet; and
- (4) set back from residential buildings four hundred (400) feet.

(b) Staging of manure at the manure application site is prohibited:

- (1) within three hundred (300) feet of surface waters of the state, drainage inlets, including water and sediment control basins, or water wells unless there is a:
 - (A) barrier; or
 - (B) surface gradient that contains or directs any contaminated runoff away from the waters of the state, drainage inlets, including water and sediment control basins, or water wells;
- (2) on any area with a slope greater than six percent (6%), unless run-on and runoff is controlled; or
- (3) on any standing water, waterway, or flood plain.

(c) Solid manure, litter, or contaminated bedding may not be placed outside of any approved manure storage facility at the CFO overnight or during inclement weather.

(d) The application of manure is prohibited in the following conditions:

- (1) saturated ground; and
- (2) manure applied from manure application equipment operating on a public road.

(e) For large CAFOs as defined in 40 CFR 122.23(b) and CAFOs with a NPDES permit, surface application of manure, litter, or process wastewater to frozen or snow covered ground is prohibited, unless allowed under a NPDES permit obtained by the CAFO.

(f) CFOs not listed in subsection (e) of this section may apply manure on frozen or snow covered ground only when there is an emergency as defined in subsection (g) of this section.

(g) For the purposes of this section, an emergency application is only allowed when there is an immediate need to apply manure to comply with the manure storage requirement of 327 IAC 19-12-4 due to unforeseen circumstances affecting the storage of the liquid manure. The unforeseen circumstances must be beyond the control of the owner of the CFO, including but not limited to natural disaster, extreme weather conditions, or equipment or structural failure. The need to apply manure to maintain required storage capacity due to improper design or management of the manure storage facility, including but not limited to a failure to properly account for the volume of manure to be stored shall not be considered an emergency for purposes of this section.

(h) The following requirements apply to all emergency land application of liquid manure on frozen or snow covered ground:

- (1) The person must notify the appropriate department field office by telephone prior to the

application.

(2) The following information must be provided or the notification will not be considered complete:

- (A) CFO owner's name;
- (B) Facility name;
- (C) Facility ID number;
- (D) Reason for emergency application;
- (E) Date of land application;
- (F) Estimated number of gallons of manure to be applied; and
- (G) Location of the application fields.

The owner must document the emergency as well as actions taken to abate it and keep that information in the CFO's operating record.

(3) The manure must be applied in accordance with all land application requirements of this rule and additionally, may only be applied on a field where the following conditions are met:

- (A) No application to land with a slope greater than two percent (2%), unless there is forty percent (40%) crop residue or vegetated crop cover on the land application site.
- (B) No application in a flood plain.
- (C) Application cannot be closer than two hundred (200) feet from any surface water.
- (D) The application rate for all farms can be no more than a total of fifty percent (50%) of the agronomic rate, based on Table 1 in 327 IAC 19-14-3.

(4) Once the emergency is abated, land application of manure must cease to frozen or snow covered ground.

(i) Subsections (f), (g) and (h) do not apply to the application of liquid manure injected or incorporated into the soil on the same date.

(j) Liquid or solid manure must not be applied to highly erodible land unless:

- (1) the land has forty percent (40%) residue protection or crop cover; or
- (2) it is applied in accordance with a conservation plan described in section 3(f)(13) of this rule.

(k) Any manure application, except those described in subsection (l), which causes a water quality violation:

- (1) is a violation of this article; and
- (2) may result in enforcement action.

(l) Subsection (k) does not apply to organic or inorganic matter that consists of fertilizer material that:

- (1) is contained in:
 - (A) runoff from a storm event; or
 - (B) irrigation return flow; and
- (2) enters waters of Indiana as a result of land application of the fertilizer material that:
 - (A) is for agricultural purposes;
 - (B) is done at appropriate agronomic rates for proper nutrient uptake in the field;
 - (C) is applied in accordance with this rule; and
 - (D) is documented.

(Water Pollution Control Board; 327 IAC 19-14-4)

327 IAC 19-14-5 Spray irrigation

Authority: IC 13-13-5-1; IC 13-15-1-2; IC 13-15-2-1

Affected: IC 13-18-10

Sec. 5. (a) Spray irrigation of liquid manure and process wastewater must be conducted to prevent equipment leaks and excessive application. Application is deemed excessive when the application rate exceeds the infiltration rate of the soil where the application is occurring, expressed in inches per hour.

(b) Application must be conducted:

(1) under the constant supervision of a person; or

(2) with devices to detect pressure loss due to leaks and devices to shut down the system if leaks are detected.

(c) Manure and process wastewater must not be applied by spray irrigation to any land that has less than twenty (20) inches of soil above the bedrock.

(d) Spray irrigation in a flood plain is prohibited unless the following conditions are met:

(1) The setback from surface water is increased to two hundred (200) feet.

(2) Spraying is only done during months that the NRCS soil data mart indicates have a low potential for flooding.

(3) There is no expectation of flooding, based on:

(A) available weather forecast information; and

(B) rainfall or flood conditions upstream of the land application area.

(4) A spray irrigation plan is completed, which must be kept in the operating record and includes the following:

(A) A map of the flood plain area.

(B) A timeline of when the spraying will occur.

(C) A description of the methods used in subsection (b).

(Water Pollution Control Board; 327 IAC 19-14-5)

327 IAC 19-14-6 Manure application setbacks

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 6. (a) Except as otherwise provided under this section, application of manure and process wastewater must be in accordance with the setbacks in Table A: Manure Application Setback Distances, from Indiana NRCS conservation practice standard 633: Waste Utilization, October 2007.

(1) All setback distances must be measured from the edge of the area of actual placement of manure or process wastewater on the land.

(2) The property line setback distances in this subsection may be waived in writing by the owner of the adjoining property.

(3) The setback is the width of the filter strip if a properly designed and maintained filter strip of at least fifty (50) feet in width is located between the application site and any of the following:

(A) Surface waters of the state.

(B) Any known private well.

(C) The surface opening or lowest point of any sinkhole.

(D) Any drainage inlet, including water and sediment control basins.

(4) The setback is ten (10) feet if a gradient barrier is located between the application site and any of the following:

(A) Surface waters of the state.

- (B) Any known well.
- (C) The surface opening or lowest point of any sinkhole.
- (D) Any drainage inlet, including water and sediment control basins.

- (b) When planning land application, the owner/operator must take into account the:
- (1) weather forecast and likelihood of precipitation events for the twenty-four (24) hour period before and after the application; and
 - (2) site soil conditions;

to assure that manure and process wastewater are not applied before, during, or immediately following a rain event that, when combined with soil conditions, would likely result in runoff.

(c) Land application sites must be inspected to identify any field tile outlets, grassed waterways, and surface water conveyance channels under or immediately bordering the land application site. Monitoring of identified field tile outlets, waterways, and surface water conveyance channels based on:

- (1) color;
- (2) flow;
- (3) volume and volume change; and
- (4) odor and change in odor;

must occur during and immediately following land application of the manure or process wastewater. If there is evidence of manure or process wastewater discharging from the field tile outlet, the land application must cease immediately and the flow stopped or captured. Any flow that is captured shall be either land applied or returned to an approved manure storage facility.

(d) The monitoring activities conducted in accordance with subsection (c) must be documented and placed in the operating record.

(Water Pollution Control Board; 327 IAC 19-14-6)

327 IAC 19-14-7 Marketing and distribution of manure

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 7. (a) The owner/operator of the CFO shall provide an information sheet to any person that receives or purchases more than ten (10) cubic yards of dry manure or four thousand (4,000) gallons of liquid manure in a year from the CFO unless the owner/operator takes responsibility for applying the manure.

- (b) The information sheet must contain, at a minimum, the following information:
- (1) The name and address of the CFO providing the manure.
 - (2) A statement indicating that it is unlawful to allow the manure to enter any waters of the state.
 - (3) Information on the nutrient content of the manure.
 - (4) The manure application requirements of this rule.

(c) The operating record must contain and be maintained and updated with records of any person who receives or purchases more than ten (10) cubic yards of dry manure or four thousand (4,000) gallons of liquid manure in a year to include the following:

- (1) The name and address of the person receiving or purchasing the manure.
- (2) The amount of manure received or purchased by the person.
- (3) A copy of the information sheet.

(d) Anyone purchasing or receiving more than ten (10) cubic yards of dry manure or four thousand (4,000) gallons of liquid manure in a year must:

- (1) have a nutrient application certification; and
- (2) obtain all applicable certifications from the office of the state chemist.

(e) If a manure distribution program is used, IDEM may allow for a waiver of a facility's total land application acreage requirements if:

- (1) the documentation as described in subsections (b) and (c) from the previous three (3) years is submitted showing the operation has sold or distributed the manure produced at the facility; or
- (2) contracts for the entire approval term for marketing the manure produced at the facility is submitted to the department.

(f) In order to obtain the waiver described in subsection (e), the owner/operator of the CFO must submit a certification to the department, which must include the amount of manure:

- (1) produced by the facility;
- (2) marketed by the facility; and
- (3) that was land applied.

(g) All records in this section must be made available to a representative of the department during an inspection.

(Water Pollution Control Board; 327 IAC 19-14-7)

Rule 15. Decommissioning of Manure Storage Facilities

327 IAC 19-15-1 Applicability

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 1. The owner/operator of a CFO subject to this article that plans to decommission a manure storage facility must comply with the requirements in section 2 of this rule. A manure storage facility is deemed decommissioned when the environmental threat has been removed.

(Water Pollution Control Board; 327 IAC 19-15-1)

327 IAC 19-15-2 General requirements

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 2. (a) The owner/operator of a CFO that plans to decommission a manure storage facility shall do the following:

- (1) Decommission the manure storage facility in accordance with the requirements in this section prior to expiration of the approval.
- (2) Continue to maintain the manure storage facility in accordance with the requirements of this article until the manure is removed.
- (3) Have all the manure removed from the manure storage facility to the extent practical.
- (4) Have the manure:
 - (A) applied to the land in accordance with 327 IAC 19-14; or
 - (B) managed in accordance with this article and applicable state and federal laws.
- (5) Follow the requirements in the Indiana NRCS Conservation Practice Standard Code 360, Closure of Waste Impoundments, October 2004, if applicable.
- (6) Have all associated appurtenances and conveyance structures removed from

uncovered manure storage facilities.

(7) Recalculate the storage capacity for the CFO.

(8) Notify the department:

(A) before demolishing or converting the use of any manure storage facility; and

(B) of the intended future use of the manure storage facility if the manure storage facility is to be converted to another use.

(b) The owner/operator shall submit a certification to the commissioner within thirty (30) days of completing the requirements in this section that states compliance with the requirements in this section.

(c) If deemed necessary to protect human health or the environment, the commissioner may require additional decommissioning activities based on:

(1) surface or ground water contamination;

(2) evidence of leakage, seepage, manure releases, or spills; or

(3) other criteria related to protection of human health or the environment.

The commissioner shall provide written documentation describing the basis for any required additional activities.

(Water Pollution Control Board; 327 IAC 19-15-2)

Rule 16. Exiting the Confined Feeding Approval Program

327 IAC 19-16-1 Applicability

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 1. This rule applies to any CFO owner/operator that wants to be removed from the program due to a:

(1) reduction in the size of the CFO to a number of animals that is less than the definition of CFO in 327 IAC 19-2-5; or

(2) decision to cease operation and completely close the entire CFO.

(Water Pollution Control Board; 327 IAC 19-16-1)

327 IAC 19-16-2 Reduction in size of the operation

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 2. (a) A CFO may be removed from the regulated confined feeding approval program, but continue to operate as a smaller operation, if:

(1) the department has received a request from the owner/operator to be removed from the program and confirming that the CFO has and maintains fewer animals than the definition of CFOs in 327 IAC 19-2-5; and

(2) approved by the commissioner based on a review of the criteria in subsection (b).

(b) The commissioner shall review the following criteria in determining if a request to exit the confined feeding approval should be approved:

(1) The number of animals at the CFO.

(2) Past enforcement actions relative to any discharges and current compliance with any outstanding violations.

(3) Manure inventory.

(4) Appropriate decommissioning per the requirements in 327 IAC 19-15-2(a) of any manure

storage facilities that will no longer be used.

(5) Existence of any conditions that pose a threat to human health or the environment.

(c) The commissioner shall send the owner/operator a letter of confirmation when the department has verified that the requirements of subsection (a) have been met.

(d) For a CFO that has been removed from the confined feeding operation approval program under subsection (a), the owner/operator must submit a new application under this article to again operate a CFO as defined in 327 IAC 19-2-5.

(Water Pollution Control Board; 327 IAC 19-16-2)

327 IAC 19-16-3 Closing the operation

Authority: IC 13-14-8-7; IC 13-15-2-1; IC 13-18-10-4

Affected: IC 13-11-2; IC 13-14; IC 13-15; IC 13-18; IC 13-30

Sec. 3. (a) A CFO may be removed from the regulated confined feeding approval program and completely closed if the department has been notified that:

(1) all livestock animals are removed from the site; and

(2) the CFO decommissioned all manure storage facilities in accordance with 327 IAC 19-15-2, including the removal of all manure.

(b) A CFO will not be allowed to exit the CFO program until all manure generated during the time the CFO was regulated has been disposed of or land applied in accordance with this article.

(c) The commissioner shall send the owner/operator a letter of confirmation when the department has verified that the requirements of subsection (a) have been met.

(Water Pollution Control Board; 327 IAC 19-16-3)

SECTION 2. 327 IAC 16 IS REPEALED.